

## WHAT IS CLAIMED IS:

1. A method for operating a computer to model operations of a business, said method comprising the steps of:

prompting a user to input data relating to at least one of volume, assignments, cash application, adjustments, collections, client services, tolerance, labor, file/mail/imaging, and capacity;

determining from the data whether the staff of the business has capacity to carry out tasks of the business; and

displaying at least one scenario generated from the input data and capacity determination.

2. A method according to Claim 1 wherein said step of determining further comprises the step of determining an invoice processing capacity according to:

$$\frac{A \times B \times C \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times (1 + D)}{E},$$

where A = a number of assignments for FTEs, B = net time worked, C = productive hours per day, D = a percentage of possible overtime, and E = an average invoice time in seconds.

3. A method according to Claim 1 wherein said step of determining further comprises the step of determining a cash application capacity according to:

$$\frac{A \times B \times C \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times (1 + D)}{E},$$

where A = a number of cash applications for FTEs, B = net time worked, C = productive hours per day, D = a percentage of possible overtime, and E = an average invoice time in seconds.

4. A method according to Claim 1 wherein said step of determining further comprises the step of determining a number of cash application and invoice processing FTEs according to:

$$\frac{A \times B}{C \times D \times 60 \text{ sec/min} \times 60 \text{ min/hr}},$$

where A = an average invoice or application time in seconds, B = a number of new invoices or payments, C = net time worked and D = productive hours per day.

5. A method according to Claim 1 wherein said step of determining further comprises the step of determining a collection capacity according to

a number of customers cleared today by calling + a number of customers cleared by write-off + a number of customers cleared without collections.

6. A method according to Claim 5 wherein

the number of customers cleared today by calling is defined as outbound calling effectiveness  $\times$  a number of calls made today, outbound calling effectiveness is defined as a number calls made per day  $\div$  a number of calls required to clear all customers,

the number of customers cleared by write-off is defined as a percentage of daily volume as bad debt  $\times$  daily volume dollars  $\div$  an average customer past due amount,

the number of customers cleared without collections activity is defined as a percentage of daily volume as bad debt  $\times$  daily volume in dollars  $\div$  an average customer past due amount,

the number of calls made per day is defined as a number FTE  $\times$  productive hours per day  $\times$  a percentage of collections work time for outbound calls  $\div$  average collections call time, and

the number of calls required to clear all customers is defined as number calls per customer per month to clear customer  $\times$  total number past due customer  $\div$  number of dates of the month.

7. A method according to Claim 1 wherein said step of determining further comprises the step of determining a number of collections FTEs according to

a number of collections FTEs + maximum number of collectors added at one hiring, where number of collections FTEs is defined as (a number of calls per month requesting to clear customers  $\times$  a total number of customers past due  $\times$  an average of collections call times  $\times$  a time for outbound calls  $\times$  net time worked) / (a number of dates of the month  $\times$  a number of productive work hours).

8. A method according to Claim 1 wherein said step of determining further comprises the step of determining a number of adjustments FTEs according to

(1 + (a value of adjustments items created / an average adjustments item value)  $\times$  an average adjustments action time in minutes) / (productive hours per day  $\times$  60).

9. A method according to Claim 1 wherein said step of determining further comprises the step of determining an adjustments FTE cost according to

(a number of adjustments FTEs  $\times$  an adjustments average hourly wage  $\times$  7.5) if the adjustments FTE hiring trigger is less than 5, and

(a number of adjustments FTEs  $\times$  an adjustments average hourly wage  $\times 7.5$ ) + (a number of adjustments FTEs  $\times$  an adjustments average hourly wage  $\times 7.5 \times 1.5 \times 0.4$ ) if the adjustments FTE hiring trigger is greater than or equal to 5.

10. A method according to Claim 1 wherein said step of determining further comprises the step of determining an adjustments capacity - a number of credit memos, wherein

for an adjustments FTE hiring trigger of less than 2, the number credit memos completed is (a number of adjustments FTEs  $\times$  a percentage of adjustments work clearing E-commerce items  $\times$  productive hours per day  $\times$  a percentage net time worked  $\times 60 \times$  (value of credit memos backlog / (value of credit memos backlog + value of other adjustments backlog))) / an average credit memo action time in minutes,

while for an adjustments FTE hiring trigger greater than or equal to 2, the number of credit memos completed is calculated as  $((1 + 0.4) \times$  a percentage of adjustments work clearing E-commerce items  $\times$  (number of adjustments FTEs  $\times$  productive hours per day  $\times$  a percentage net time worked)  $\times 60 \times$  (value of credit memos backlog / (value of credit memos backlog + value of other adjustments backlog))) / an average credit memo action time in minutes, and adjustments capacity – number of other adjustments completed,

if the adjustments FTE hiring trigger is less than 2, the number of other adjustments completed is calculated as (a number of adjustments FTEs  $\times$  a percentage of adjustments work clearing E-commerce items  $\times$  productive hours per day  $\times$  a percentage net time worked  $\times 60 \times$  (value of other adjustments backlog / (value of other adjustments backlog + value of credit memos backlog))) / an average adjustments action time in minutes (without credit memos),

while for an adjustments FTE hiring trigger greater than or equal to 2, a number of other adjustments completed is calculated as  $((1 + 0.4) \times$  a percentage of adjustments work clearing E-commerce items  $\times$  (number of adjustments FTEs  $\times$

productive hours per day  $\times$  a percentage net time worked)  $\times$  60  $\times$  (value of other adjustments backlog / (value of credit memos backlog + value of other adjustments backlog))) / an average adjustments action time in minutes without credit memos.

11. A method according to Claim 1 wherein said step of determining further comprises the step of determining a number of client service FTEs according to

the number of client services FTEs + 1 + 0.0000477  $\times$  a funding error rate, while if the funding error rate is less than or equal to the baseline funding error rate,

the number of client services FTEs is the number of current client services FTEs - 1.

12. A method according to Claim 1 wherein said step of determining further comprises the step of determining a client services FTE cost according to

a number of client services FTEs  $\times$  an average hourly wage for client services FTEs  $\times$  7.5 if the client services FTE hiring trigger is less than 5, and

if the client services FTE hiring trigger greater than or equal to 5, client services FTE cost = (a number of client services FTEs  $\times$  a client services average hourly wage  $\times$  7.5)  $\times$  (1 + 0.4  $\times$  1.5).

13. A computer programmed to:

prompt a user to input data relating to at least one of volume, assignments, cash application, adjustments, collections, client services, tolerance, labor, file/mail/imaging, and capacity;

determine from the data whether the staff of the business has capacity to carry out tasks of the business; and

display a computer generated screen which comprises at least one scenario generated from the input data and capacity determination.

14. A computer according to Claim 13 further programmed to determine an invoice processing capacity according to:

$$\frac{A \times B \times C \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times (1 + D)}{E},$$

where A = a number of assignments for FTEs, B = net time worked, C = productive hours per day, D = a percentage of possible overtime, and E = an average invoice time in seconds.

15. A computer according to Claim 13 further programmed to determine a cash application capacity according to:

$$\frac{A \times B \times C \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times (1 + D)}{E},$$

where A = a number of cash applications for FTEs, B = net time worked, C = productive hours per day, D = a percentage of possible overtime, and E = an average invoice time in seconds.

16. A computer according to Claim 13 further programmed to determine a number of cash application and invoice processing FTEs according to:

$$\frac{A \times B}{C \times D \times 60 \text{ sec/min} \times 60 \text{ min/hr}},$$

where A = an average invoice or application time in seconds, B = a number of new invoices or payments, C = net time worked and D = productive hours per day.

17. A computer according to Claim 13 further programmed to determine a collection capacity according to a number of customers cleared today by

calling + a number of customers cleared by write-off + a number of customers cleared without collections.

18. A computer according to Claim 5 further programmed to:

determine the number of customers cleared today by calling as  $\text{outbound calling effectiveness} \times \text{a number of calls made today}$ , outbound calling effectiveness is defined as  $\text{a number calls made per day} \div \text{a number of calls required to clear all customers}$ ,

determine the number of customers cleared by write-off as a percentage of daily volume as  $\text{bad debt} \times \text{daily volume dollars} \div \text{an average customer past due amount}$ ,

determine the number of customers cleared without collections activity as a percentage of daily volume as  $\text{bad debt} \times \text{daily volume in dollars} \div \text{an average customer past due amount}$ ,

determine the number of calls made per day as  $\text{a number of FTEs} \times \text{productive hours per day} \times \text{a percentage of collections work time for outbound calls} \div \text{average collections call time}$ ; and

determine the number of calls required to clear all customers as  $\text{a number calls per customer per month to clear customer} \times \text{total number past due customer} \div \text{number of dates of the month}$ .

19. A computer according to Claim 13 further programmed to determine a number of collections FTEs according to

$\text{a number of collections FTEs} + \text{maximum number of collectors added at one hiring}$ , where the number of collections FTEs is defined as

$(\text{a number of calls per month requesting to clear customers} \times \text{a total number of customers past due} \times \text{an average of collections call times} \times \text{a time for}$

outbound calls  $\times$  net time worked) / (a number of dates of the month  $\times$  a number of productive work hours).

20. A computer according to Claim 13 further programmed to determine a number of adjustments FTEs according to  $(1 + (\text{a value of adjustments items created} / \text{an average adjustments item value}) \times \text{an average adjustments action time in minutes}) / (\text{productive hours per day} \times 60)$ .

21. A computer according to Claim 13 further programmed to:

determine an adjustments FTE cost according to (a number of adjustments FTEs  $\times$  an adjustments average hourly wage  $\times$  7.5) if the adjustments FTE hiring trigger is less than 5; and

determine an adjustments FTE cost according to (a number of adjustments FTEs  $\times$  an adjustments average hourly wage  $\times$  7.5) + ( a number of adjustments FTEs  $\times$  an adjustments average hourly wage  $\times$  7.5  $\times$  1.5  $\times$  0.4) if the adjustments FTE hiring trigger is greater than or equal to 5.

22. A computer according to Claim 13 further programmed to determine an adjustments capacity - a number of credit memos, wherein

for an adjustments FTE hiring trigger of less than 2, the number credit memos completed is  $(\text{a number of adjustments FTEs} \times \text{a percentage of adjustments work clearing E-commerce items} \times \text{productive hours per day} \times \text{a percentage net time worked} \times 60 \times (\text{value of credit memos backlog} / (\text{value of credit memos backlog} + \text{value of other adjustments backlog}))) / \text{an average credit memo action time in minutes}$ ,

while for an adjustments FTE hiring trigger greater than or equal to 2, the number of credit memos completed is calculated as  $((1 + 0.4) \times \text{a percentage of adjustments work clearing E-commerce items} \times (\text{number of adjustments FTEs} \times \text{productive hours per day} \times \text{a percentage net time worked}) \times 60 \times (\text{value of credit memos backlog} / (\text{value of credit memos backlog} + \text{value of other adjustments$



backlog))) / an average credit memo action time in minutes, and adjustments capacity – number of other adjustments completed,

if the adjustments FTE hiring trigger is less than 2, the number of other adjustments completed is calculated as (a number of adjustments FTEs × a percentage of adjustments work clearing E-commerce items × productive hours per day × a percentage net time worked × 60 × (value of other adjustments backlog / (value of other adjustments backlog + value of credit memos backlog))) / an average adjustments action time in minutes (without credit memos),

while for an adjustments FTE hiring trigger greater than or equal to 2, a number of other adjustments completed is calculated as  $((1 + 0.4) \times \text{a percentage of adjustments work clearing E-commerce items} \times (\text{number of adjustments FTEs} \times \text{productive hours per day} \times \text{a percentage net time worked}) \times 60 \times (\text{value of other adjustments backlog} / (\text{value of credit memos backlog} + \text{value of other adjustments backlog}))) / \text{an average adjustments action time in minutes without credit memos}.$

23. A computer according to Claim 13 further programmed to:

determine a number of client service FTEs according to the number of client services FTEs +  $1 + 0.0000477 \times \text{a funding error rate}$ , and

if the funding error rate is less than or equal to the baseline funding error rate, determine a number of client service FTEs according to a number of client services FTEs required = the number of client services FTEs - 1.

24. A computer according to Claim 13 further programmed to:

determine a client services FTE cost according to a number of client services FTEs × an average hourly wage for client services FTEs × 7.5 if the client services FTE hiring trigger is less than 5, and

if the client services FTE hiring trigger greater than or equal to 5, determine a client services FTE cost according to client services FTE cost = (a

number of client services FTEs  $\times$  a client services average hourly wage  $\times 7.5) \times (1 + 0.4 \times 1.5)$ .

25. A database comprising:

data corresponding to at least one of a business' volume, assignments, cash applications, adjustments, collections, client services, tolerance, labor, and file/mail/imaging; and

data corresponding to a determination of a number of employees needed to carry out tasks of the business.

26. A database according to Claim 25 wherein said data corresponding to a business further comprises:

data corresponding to at least one of a monthly volume for each month of the calendar year;

data corresponding to an annual increase in volume for at least one year; and

data corresponding to daily volume ratios/monthly volume conversion constant for at least one of a 1st Monday, a 1st Tuesday, a 1st Wednesday, a 1st Thursday, a 1st Friday, a 2nd Monday, a 2nd Tuesday, a 2nd Wednesday, a 2nd Thursday, a 2nd Friday, a 3rd Monday, a 3rd Tuesday, a 3rd Wednesday, a 3rd Thursday, a 3rd Friday, a 4th Monday, a 4th Tuesday, a 4th Wednesday, a 4th Thursday, a 4th Friday, a 5th Monday, and a 5th Tuesday.

27. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of an average number of invoices per payment, a percent adjustments work actually clearing an item, a percent adjustments created by customer accounts receivable item error, a percent adjustments from other error, a percent adjustments created by client accounts receivable item error, a percent accounts receivable items with no error, a percent adjustments created by client/customer mix accounts receivable item error, a number

of credit memos per dollar monthly volume, an average credit memo value, an average credit memo action time (minutes), an average adjustments hourly wage, an average adjustments action time, and an average adjustment item value.

28. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of an average cash applications hourly wage, an average payment application time, a percentage of cash applications work/time not spent on original applications, a cash applications error acceleration factor, and an average number of manual payments per dollar volume.

29. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of an average number of invoices per payment, a percentage of adjustments work actually clearing an item, a percentage of adjustments created by customer accounts receivable item error, a percentage of adjustments from other errors, a percentage of adjustments created by client accounts receivable item error, a percentage of accounts receivable items with no error, a percentage of adjustments created by client/customer mixing accounts receivable items error, a number of credit memos per dollar monthly volume, an average credit memo value, an average credit memo action time, an average adjustments hourly wage, an average adjustment action time, and an average adjustment item value.

30. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of an average collections hourly wage, an average hourly wage for collections assistants, a ratio of assistants to collectors, a maximum number of collectors, an average collections call time, a percentage of collections work/time not spent on outbound calls, a percentage of volume becoming overdue, an average past due sum per past due customer, a percentage past due becoming bad debt, a percentage overdue paying without collections activity, a number of calls per month required to clear customers, and a maximum number of collectors added in one hiring.

31. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of an average client services hourly wage, a baseline funding error rate (percent total fundings), a percentage of client services work time not funding, a client services accuracy coefficient, and a number of manual funding requests per dollar monthly volume.

32. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of allowable assignments backlog (invoices/day), allowable cash application backlog (records/day), allowable adjustments backlog (percent monthly volume), and allowable collections percent volume past due.

33. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of a number of productive work-hours per day, a percentage of total available hours not worked, a number of work-days allowable missed tolerance, and a percentage of overtime possible.

34. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of an average file/mail/imaging department hourly wage and a number of file/mail/imaging FTEs required per dollar monthly volume.

35. A database according to Claim 25 wherein said data corresponding to a business further comprises data corresponding to at least one of a maximum allowable assignments FTEs, a maximum allowable cash application FTEs, a maximum allowable adjustments FTEs, a maximum allowable collections FTEs, a maximum allowable client services FTEs, and a maximum allowable file/mail/imaging FTEs.

36. A system financial services business system for managing operations, said system comprising:

a computer;

a storage device for storing information;

a server configured to determine an operations capacity for the business based upon data relating to at least one of volume, assignments, cash application, adjustments, collections, client services, tolerance, labor, and file/mail/imaging; said server, said server further configured to be coupled to said computer via a network; and

a database comprising data corresponding to at least one of a business' volume, assignments, cash applications, adjustments, collections, client services, tolerance, labor, and file/mail/imaging and data corresponding to a determination of a number of employees needed to carry out tasks of the business.

37. A system according to Claim 36 wherein said network is at least one of the Internet, an intranet, a local area network (LAN), a wide area network (WAN), dial-in-connections, cable modems, and high-speed ISDN lines.

38. A system according to Claim 36 wherein said server is further configured to calculate a daily capacity of the number of employees as

$$\frac{A \times B \times C \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times (1 + D)}{E},$$

where A = number FTEs, B = net time worked (hours), C = productive hours per day, D = a percentage of possible overtime, and E = average time (seconds).

39. A system according to Claim 36 wherein said server is further configured to calculate a number of backlogged invoices as a number of new manual invoices + a number backlogged invoices – a number invoices processed, wherein the number of new manual invoices is defined as (daily volume × average manual invoices per 1MM monthly volume) + (E-commerce business daily volume × e-commerce average manual invoices per 1MM monthly volume) .

40. A system according to Claim 36 wherein said server is further configured to calculate a number of backlogged records as a number new manual records + a number of backlogged records - a number records applied, wherein a number of new manual records is defined as core daily net volume  $\times$  core average payments per 1MM monthly volume + E-business daily net volume  $\times$  E-business average manual payment per 1MM monthly volume.

41. A system according to Claim 36 wherein said server is further configured to calculate a collections capacity, the total number of customers cleared today, as a number of customers cleared today by calling + a number of customers cleared by write-off + a number of customers cleared without collections activity, where the number customers cleared today by calling is defined as outbound calling effectiveness  $\times$  number calls made today, outbound calling effectiveness is defined as a number of calls made per day / a number of calls required to clear all customers, a number customers cleared by write-off is defined as a percentage of daily volume as bad debt  $\times$  a daily volume amount  $\div$  an average customer past due amount, a number calls made per day is defined as a number of customers becoming past due  $\times$  a percentage of past due customers paying without collections activity, a number of customers cleared without collections activity (calling or write-off) is defined as number of customers becoming past due  $\times$  a percentage of past due customers paying without collections activity and a number calls required to clear all customers is defined as (a number of calls per customer per month to clear customer  $\times$  a total number of past due customers) / a number of dates of the month.

42. A system according to Claim 36 wherein said server is further configured to calculate a number of collections FTEs according to a number of collections FTEs + a maximum number collectors added at one hiring, and where a number of collections FTEs is defined as ((a number of calls per month requesting to clear customers  $\times$  a total number of customers past due  $\times$  an average of collections call times  $\times$  a time for outbound calls  $\times$  net time worked) / (a number of dates of the month  $\times$  a number of productive work hours)) - a number of collections FTEs.

43. A system according to Claim 36 wherein said server is further configured to calculate a number of adjustments FTEs as  $(1 + (\text{a value of adjustments items created} / \text{an average adjustments item value}) \times \text{an average adjustments action time in minutes}) / (\text{productive hours per day} \times 60)$ , if an adjustments backlog volume is greater than monthly adjustments backlog volume tolerance, and as number adjustments FTEs - 1 if an adjustments backlog volume is less than or equal to monthly adjustments backlog volume tolerance.

44. A system according to Claim 36 wherein said server is further configured to calculate a number of client services FTEs as the number of client services FTEs +  $1 + 0.0000477 \times \text{a funding error rate}$ , if the funding error rate is less than or equal to a baseline funding error rate, the number of client services FTEs is calculated as the number of client services FTEs - 1.

45. A computer program embodied on a computer-readable medium for managing business operations, comprising:

a code segment to process data relating to at least one of a business' volume, assignments, cash application, adjustments, collections, client services, tolerance, labor, and file/mail/imaging; and

a code segment to analyze based on a plurality of rules for calculating a number of employees needed to carry out tasks of the business.

46. A computer program according to Claim 45 wherein the plurality of rules are at least one of a rule for calculating a daily capacity of the number of employees, a rule for calculating a number of collections FTEs, a rule for calculating a number of adjustments FTEs and a rule for calculating a number of client services FTEs.

47. A computer program according to Claim 46 wherein the rule for calculating a daily capacity of the number of employees is

$$\frac{A \times B \times C \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times (1 + D)}{E},$$

where A = number FTEs, B = net time worked (hours), C = productive hours per day, D = a percentage of possible overtime, and E = average time (seconds).

48. A computer-readable medium according to Claim 46 wherein the rule for calculating a revised number of collections FTEs is a current number of collections FTEs + a maximum number of collectors added at one hiring, where the current number of collections FTEs is defined as ((a number of calls per month requesting to clear customers × a total number of customers past due × an average of collections call times × a time for outbound calls × net time worked) / (a number of dates of the month × a number of productive work hours)) - a number of collections FTEs.

49. A computer-readable medium according to Claim 46 wherein the rule for calculating a number of adjustments FTEs is (1 + (a value of adjustments items created / an average adjustments item value) × an average adjustments action time in minutes) / (productive hours per day × 60), if an adjustments backlog volume is greater than monthly adjustments backlog volume tolerance, and as number adjustments FTEs -1 if an adjustments backlog volume is less than or equal to monthly adjustments backlog volume tolerance.

50. A computer-readable medium according to Claim 46 wherein the rule for calculating a number of client services FTEs is the number of client services FTEs + 1 + 0.0000477 × a funding error rate, if the funding error rate is less than or equal to a baseline funding error rate, the number of client services FTEs is calculated as the number of client services FTEs - 1.